



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/827,660 | 04/06/2001 | Magnus Karlsson | TI-32578 | 5392 |

7590 10/20/2004
DENNIS MOORE
TEXAS INSTRUMENTS INCORPORATED
P. O. BOX 655474
M/S 3999
DALLAS, TX 75265

| |
|----------|
| EXAMINER |
|----------|

MACE, BRAD THOMAS

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2663

DATE MAILED: 10/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|-------------------------------|---------------------------------|--|
| Office Action Summary | Application No. 09/827,660 | Applicant(s) KARLSSON ET AL. | |
| | Examiner Brad T. Mace | Art Unit 2663 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16 and 18-20 is/are allowed.
- 6) ☐ Claim(s) 1,2,8 and 9 is/are rejected.
- 7) ☐ Claim(s) 3-7,10-15 and 17 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 July 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:

On pg. 3, line 1, "communication" should be changed to "communicate".

On pg. 5, line 16, "Asynchronous" should be changed to "asynchronous";

line 16 "cell" should be changed to "cells".

On pg. 18, line 12, "operation" should be changed to "Operation".

On pg. 29, line 11, "he" should be changed to "be".

On pg. 38, lines 1-4 do not correlate with Figure 5? (Reference numbers do not correlate with Figure 5).

On pg. 45, line 6, "contains" should be changed to "containing".

On pg. 37, line 15, "AAL" should be changed to "AAL2".

On pg. 37, line 19, and on pg. 38, line 1, and on pg. 39, lines 10, 16, and on pg. 40, line 1, "DSP 160" should be replaced with "DSP 412".

On pg. 37, line 19, and on pg. 38, lines 2, 12, 13, 15, and on pg. 39, lines 10, 17, "host 190" should be replaced with "host 414".

Appropriate correction is required.

Drawings

2. The drawings are objected to because:

Reference 101 is not shown in Figure 1 as stated by the specification on line 16 of pg. 11.

Reference 145 of Figure 2 is not mentioned in the specification.

Art Unit: 2663

Reference 412 and 414 is not mentioned in the specification.

Reference 614 has been used to designate two separate items in Figure 6B, appropriate correction in the specification is also needed.

Reference 412 has been used to designate "DSP A" and "DSP B" in Figure 5, while the corresponding "AAL2 Rx FIFO" have different reference numbers, hence "DSP A" and "DSP B" should be labeled separately.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

3. Claims 1, 8, and 17 are objected to because of the following informalities:

Art Unit: 2663

In claim 1, line 11, "porcessor" should be "processor".

In claim 8, line 13, "opeably" should be "operably".

In claim 8, line 14, "porcessor" should be "processor".

In claim 17, line 2, "processor; and" should be "processor.".

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 2, 8, and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Publication No. 2003/0076839 (Li et al.).

The applied reference has a common assignee with the instant application.

Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Regarding claim 1:

Li et al. discloses an apparatus for receiving a common-part sublayer packet (CPS-packet) on an ATM adaptation layer (AAL) configured connection within an asynchronous transfer mode (ATM) system comprising a digital signal processor (DSP) sub-system and a host processor, comprising

a first direct memory access unit (Figure 1, reference 12, direct memory access unit) having an output coupled to the DSP sub-system (Figure 1, reference 150, processing core, which is subsystem of the slave digital signal processing unit 10) and operably configured to forward data stored in a phone line memory unit (Figure 1, reference 140, local memory) to the DSP sub-system (Figure 1, see connection between reference 140 and 150), the phone line memory unit corresponding to a channel identification (CID) (since there are multiple local memory units (Figure 1, references 140-14N) corresponding to multiple processing cores, then each local memory unit corresponds to a different channel in connection with the direct memory access unit as shown in Figure 1, hence each channel is separately identified (channel identification) so that the data can be passed to the correct processing core), and

a second direct memory access unit (Figure 1, reference 12, where the direct memory access unit handles the passing of data to all processing cores) having an output coupled to the host processor (Figure 1, reference 15N, where there are multiple processing cores) and operably configured to forward data stored in a host memory unit (Figure 1, reference 14N, where there are multiple local memory units) to the host processor (Figure 1, see connection between reference 14N and 15N), wherein data is forwarded to the host memory unit in response to channel identification (CID) and user-

to-user indication (UUI) filtering (since there are multiple local memory units (Figure 1, references 140-14N) corresponding to multiple processing cores (Figure 1, references 150-15N), then each local memory unit corresponds to a different channel in connection with the direct memory access unit as shown in Figure 1 (thus each channel having its own identification), and since each processing core (user) receives only the data meant for it (user indication), that data is not sent to the other processing cores (filtered)).

Regarding claim 2:

Li et al. discloses that the apparatus is implemented in an AAL2 module (Figure 1, where data is transmitted in the ATM system (data could include voice information as indicated by the use of the digital signal processing unit, hence voice over ATM, AA2).

Regarding claim 8:

Li et al. discloses a system for receiving a common-part sublayer packet (CPS-packet) on an ATM adaptation layer (AAL) configured connection within an asynchronous transfer mode (ATM) system comprising a digital signal processor (DSP) sub-system and a host processor, comprising

a switching processor (Figure 1, reference 12, where the DMA also acts as a switching processor in deciding which channel to send the data) for reading a channel identification (CID) and a user-to-user indication (UUI) associated with a received CPS-packet and having an output for forwarding the CID and the UUI (since there are multiple local memory units (Figure 1, references 140-14N) corresponding to multiple processing cores (Figure 1, references 150-15N), then each local memory unit corresponds to a different channel in connection with the direct memory access unit as

Art Unit: 2663

shown in Figure 1 (thus each channel having its own identification), and since each processing core (user) receives only the data meant for it (user indication), that data is not sent to the other processing cores (filtered), hence the switching processor receives and forwards data associated with the identification of the channel and the filtering to data to a particular processing core (user)),

a first direct memory access unit (Figure 1, reference 12, direct memory access unit) having an output coupled to the DSP sub-system (Figure 1, reference 150, processing core, which is subsystem of the slave digital signal processing unit 10) and operably configured to forward data stored in a phone line memory unit (Figure 1, reference 140, local memory) to the DSP sub-system (Figure 1, see connection between reference 140 and 150), the phone line memory unit corresponding to a channel identification (CID) (since there are multiple local memory units (Figure 1, references 140-14N) corresponding to multiple processing cores, then each local memory unit corresponds to a different channel in connection with the direct memory access unit as shown in Figure 1, hence each channel is separately identified (channel identification) so that the data can be passed to the correct processing core), and

a second direct memory access unit (Figure 1, reference 12, where the direct memory access unit handles the passing of data to all processing cores) having an output coupled to the host processor (Figure 1, reference 15N, where there are multiple processing cores) and operably configured to forward data stored in a host memory unit (Figure 1, reference 14N, where there are multiple local memory units) to the host processor (Figure 1, see connection between reference 14N and 15N), wherein data is

Art Unit: 2663

forwarded to the host memory unit in response to channel identification (CID) and user-to-user indication (UUI) filtering (since there are multiple local memory units (Figure 1, references 140-14N) corresponding to multiple processing cores (Figure 1, references 150-15N), then each local memory unit corresponds to a different channel in connection with the direct memory access unit as shown in Figure 1 (thus each channel having its own identification), and since each processing core (user) receives only the data meant for it (user indication), that data is not sent to the other processing cores (filtered)).

Regarding claim 9:

Li et al. discloses that the system is implemented in an AAL2 module (Figure 1, where data is transmitted in the ATM system (data could include voice information as indicated by the use of the digital signal processing unit, hence voice over ATM, AA2).

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brad T. Mace whose telephone number is (571) 272-3128. The examiner can normally be reached on Monday -Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (571) 272-3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

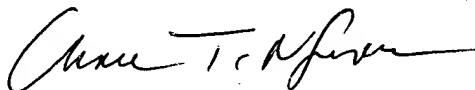
Art Unit: 2663

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

btm

Brad T. Mace
Examiner
Art Unit 2663

btm
October 14, 2004



CHAU NGUYEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600